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| 10/535,349 | 05/18/2005 | Soenke Ostertun | DE03 0090 US | 7138 |

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| EXAMINER |
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CHAUDRY, MUJTABA M

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| ART UNIT | PAPER NUMBER |
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2112

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| NOTIFICATION DATE | DELIVERY MODE |
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05/23/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

| | | | |
|------------------------------|---------------------------------------|--|--|
| Office Action Summary | Application No. 10/535,349 | Applicant(s) OSTERTUN ET AL. | |
| | Examiner Mujtaba K. Chaudry | Art Unit 2112 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/18/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-25 are presented for examination.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The references listed in the information disclosure statements (IDS) submitted May 18, 2005 were considered. The submission is in compliance with the provisions of 37 CFR 1.97.

Oath/Declaration

The Oath filed May 18, 2005 complies with all the requirements set forth in MPEP 602 and therefore is accepted.

Drawings

The drawings submitted May 18, 2005 are objected to because:

- Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled

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“Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Appropriate corrections are required.

Specification

608.01(a) [R-5] Arrangement of Application

37 CFR 1.77. Arrangement of application elements.

(a) The elements of the application, if applicable, should appear in the following order:

- (1) Utility application transmittal form.
- (2) Fee transmittal form.
- (3) Application data sheet (see § 1.76).
- (4) Specification.
- (5) Drawings.
- (6) Executed oath or declaration.

(b) The specification should include the following sections in order:

- (1) Title of the invention, which may be accompanied by an introductory portion stating the name, citizenship, and residence of the applicant (unless included in the application data sheet).
 - (2) Cross-reference to related applications (unless included in the application data sheet).
 - (3) Statement regarding federally sponsored research or development.
 - (4) The names of the parties to a joint research agreement.
 - (5) Reference to a “Sequence Listing,” a table, or a computer program listing appendix submitted on a compact disc and an incorporation-by-reference of the material on the compact disc (see § 1.52(e)(5)). The total number of compact discs including duplicates and the files on each compact disc shall be specified.
 - (6) Background of the invention.
 - (7) Brief summary of the invention.
 - (8) Brief description of the several views of the drawing.
 - (9) Detailed description of the invention.
 - (10) A claim or claims.
 - (11) Abstract of the disclosure.
 - (12) “Sequence Listing,” if on paper (see § 1.821 through 1.825).
- (c) The text of the specification sections defined in paragraphs (b)(1) through (b)(12) of this section, if applicable, should be preceded by a section heading in uppercase and without underlining or bold type.

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The specification is objected to because it does not conform to the guidelines above.

Applicant is reminded of the proper language and format for an abstract of the disclosure. See MPEP 608.01(b).

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title or claim(s). It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract is objected to because:

- The abstract of the disclosure is objected to because it does not conform to the guidelines above.

Correction is requested.

Claim Objections

Claims 1-25 are objected to because of the following informalities:

- There is extra space in the claims that needs to be omitted.
- Claim 11 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 11 and claim 1 are essentially the same.

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- Claim 19 is objected to under 37 CFR 1.75(c) as being in improper form because it is a multiple dependent claim which depends from claim 1 and 11. See MPEP § 608.01(n).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter which is recited in a single means. For example, the means does not appear in combination with another recited element. See MPEP 2164.08(a) and *In re Hyatt*, 708 F.2d 712, 714-715, 218 USPQ 195, 197 Fed. Cir. 1983.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Although other issues may exist, the Examiner has pointed out issues noted. Dependent claims for which no issues are noted are inherently rejected by nature of inherency to base claim 1. An initial search has been done and some references are cited and not applied. However a

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comprehensive search will be performed once a thorough understanding of the invention is complete.

Claim 1 recites, "...**memory module having at least one memory cell area in which physical states representing regular data are mapped by means of at least one mapping function that describes at least one error correction code, for example at least one Hamming code, characterized by at least one further physical state representing at least one or special state in the error correction code.**"

- It is not clear how the physical states of the memory are *mapped* based on an error correction code. The physical state of a memory cell is normally referred to as the memory address that is electronically presented (in binary form) on a bus in order to enable the circuitry to access a particular storage cell in the memory. In contrast, logical address/state in the address at which a memory location appears to reside from the perspective of executing an application program. Physical memory may be mapped to different logical addresses for various purposes. For example, the same physical memory may appear at two logical addresses and if accessed by the program at one address, data will pass through the processor cache whereas if it is accessed at the other address, it will bypass the cache.
- The phrase "for example" does not constitute a positive limitation.
- It is not clear what is meant by, "...at least one further physical state representing at least one exceptional or special state..." It seems that essential steps are missing from the claim.

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Claim 2 recites, "...the error correction code and/or the possible reactions to the various physical states..."

- It is not clear what are the possible reactions and various states. The claim is vague and indefinite.

Claim 3 defines the "exception or special state" by a number of limitations. It is not clear if all of the limitations combined constitute the state of any one of them.

Claim 4 recites in the last line, "resulting in twelve-bit code words or data words" which is improper as data words and code words are two distinct words as is well known in the art.

Claim 5 recites, "twelve-bit code words or data words" which is improper as data words and code words are two distinct words as is well known in the art. Furthermore, "set bits" and "erased bits" are not defined.

Claim 6 recites, "...third redundant bit corresponds to parity of the seventh data bit, of the sixth data bit, of the fifth data bit of the fourth data bit, of the first data bit..." It is not clear what this means. It is not possible to define a bit with multiple bits. The claim is replete with vagueness.

Claim 10 is indefinite because it recites, "...in some other way" which is not a positive limitation.

Claim 11 is a restatement of claim 1 and fails to further limit claim 1. Claim 11 also includes all the problems as in claim 1 stated above.

Claim 12 recites, "...limited extent for the regular data" which is not definite claim language.

Claim 14 recites in the last line, "resulting in twelve-bit **code words or data words**" which is improper as data words and code words are two distinct words as is well known in the art.

Claim 15 recites, "twelve-bit **code words or data words**" which is improper as data words and code words are two distinct words as is well known in the art. Furthermore, "**set bits**" and "**erased bits**" are not defined.

Claim 16 recites, "by at least **twelve-fold**" which is not clear. Furthermore, claim 16 depends from claim 14 and it is not clear which step of claim 14 is claim 16 attempting to further limit. Essential elements are missing.

Claim 17 recites, "...third redundant **bit** corresponds to parity of the seventh data bit, of the sixth data bit, of the fifth data bit of the fourth data bit, of the first data bit..." It is not clear what this means. It is not possible to define a bit with multiple bits. The claim is replete with vagueness.

Claim 19 is deemed as a **hybrid claim** since it attempts to combine the method and apparatus. Furthermore, it is a **multiple dependent claim** since it depends on claim 1 and 11. See MPEP 2173.05(p).

Claim 20 recites "**can**" in both of the steps. This is not a positive limitation since "can" refers to being optional.

Claim 21 recites, "by at least **twelve-fold**" which is not clear. It is not clear what is meant by, "exceptional or special state..." It seems that essential steps are missing from the claim.

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Claim 25 attempts to implement the method of claim 11 within a smart card controller without providing detailed information about the process and the controller with interface. The claim is clear what elements are included to perform the implementation.

Appropriate correction and/or clarification is requested.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Additional pertinent prior arts are included herein for Applicant's review.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mujtaba K. Chaudry whose telephone number is 571-272-3817. The examiner can normally be reached on Mon-Fri 9-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on 571-272-6962.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Mujtaba K Chaudry/
Primary Examiner, Art Unit 2112
May 20, 2008